Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An isolated nucleic acid comprising a member selected from the group consisting of:

(a) a polynucleotide having at least ~~75%~~80% sequence identity compared to the full-length of the sequence of SEQ ID NO: 7; ~~NOS: 1, 3, 5, 7, 9, 11, 13, 15, 17-20, 22, or 24;~~ wherein the % sequence identity is determined by GAP 10 analysis using default parameters and wherein the polynucleotide has IPPK activity; and

~~(b) a polynucleotide which encodes a polypeptide of SEQ ID NO: NOS: 2, 4, 6, 8, 10, 12, 14, 16, 21, 23, 25, or 29-37;~~

~~(c) a polynucleotide amplified from a plant nucleic acid library using the primers of SEQ ID NOS: 26 and 27, or primers determined by using Vector NTI Suite, InforMax Version 5;~~

~~(d) a polynucleotide comprising at least 20 contiguous bases of SEQ ID NO: NOS: 1, 3, 5, 7, 9, 11, 13, 15, 17-20, 22, or 24;~~

~~(e) a polynucleotide comprising at least 25 nucleotides in length which hybridizes, under high stringency conditions and a wash in 0.1X SSC at 60°C, to a polynucleotide having the sequence set forth in SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, 17-20, 22, or 24;~~

~~(f) a polynucleotide coding for a plant inositol polyphosphate kinase (IPPK) protein other than from *Arabidopsis*;~~

~~(g) a polynucleotide having the sequence set forth in SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, 17-20, 22, or 24; and~~

~~(h)~~(b) a polynucleotide, which is complementary to a polynucleotide of (a) ~~through (g)~~.

2. (Original) The isolated nucleic acid of claim 1, wherein the polynucleotide is from a monocot or dicot.

3. (Original) A vector comprising at least one nucleic acid of claim 1.

4. (Currently Amended) An expression cassette comprising at least one nucleic acid of claim 1 operably linked to a promoter~~, wherein the nucleic acid is in sense or antisense orientation~~.

5. (Cancelled)

6. (Currently Amended) A non-human host cell containing at least one ~~expression cassette of claim 4~~ nucleic acid of claim 1.

7. (Original) The host cell of claim 6 that is a plant cell.

8. (Currently Amended) A transgenic plant comprising at least one ~~expression cassette of claim 4~~ nucleic acid of claim 1.

9. (Original) The transgenic plant of claim 8, wherein the plant is corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

10. (Currently Amended) A transgenic seed ~~from the transgenic plant of claim 8~~ comprising at least one nucleic acid of claim 1.

11. (Currently Amended) A transgenic seed ~~from the transgenic plant of claim 9~~ of claim 10, wherein the seed is from corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

12. (Cancelled)

13. (Currently Amended) An isolated ribonucleic acid sequence of claim 1 ~~of claim 12~~.

14. (Currently Amended) A method for modulating inositol polyphosphate kinase (IPPK) activity or levels in a ~~host~~ plant cell, comprising:
    (a) transforming a ~~host~~ plant cell with at least one ~~expression cassette of claim 4~~ nucleic acid of claim 1;
    (b) growing the transformed ~~host~~ plant cell under conditions sufficient to modulate IPPK activity in the ~~host~~ plant cell.

15. (Currently Amended) The method of claim 14~~, wherein the host cell is a plant cell~~ further comprising regenerating a plant from the transformed plant cell.

16. (Original) The method of claim 15, wherein the plant cell is from a monocot or a dicot.

17. (Currently Amended) A transgenic plant produced by the method of ~~claim 14~~ claim 15.

18. (Original) The transgenic plant of claim 17, wherein the plant is corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

19. (Currently Amended) The method of claim 15 wherein ~~the level~~ of phytate is reduced.

20. (Currently Amended) The method of claim 15 wherein ~~the level~~ of non-phytate phosphorous is increased.

21. (Currently Amended) A method of decreasing the level of phosphorous in non-ruminant animal waste comprising providing ~~said~~ animal feed from a plant produced by the method of ~~claim 14~~ claim19.

22-46. (Cancelled)

47. (New) A transgenic seed of claim 11 which is corn.

48. (New) An isolated nucleic acid comprising a member selected from the group consisting of:
(a) a polynucleotide which encodes a polypeptide of SEQ ID NO: 8, wherein the polynucleotide has IPPK activity; and
(b) a polynucleotide, which is complementary to a polynucleotide of (a).

49. (New) The isolated nucleic acid of claim 48, wherein the polynucleotide is from a monocot or dicot.

50. (New) A vector comprising at least one nucleic acid of claim 48.

51. (New) An expression cassette comprising at least one nucleic acid of claim 48 operably linked to a promoter.

52. (New) A non-human host cell comprising at least one nucleic acid of claim 48.

53. (New) The host cell of claim 52 that is a plant cell.

54. (New) A transgenic plant comprising at least one nucleic acid of claim 48.

55. (New) The transgenic plant of claim 54, wherein the plant is corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

56. (New) A transgenic seed comprising at least one nucleic acid of claim 48.

57. (New) The transgenic seed of claim 56, wherein the seed is from corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

58. (New) An isolated ribonucleic acid sequence of claim 48.

59. (New) A method for modulating inositol polyphosphate kinase (IPPK) activity or levels in a plant cell, comprising:
    (a) transforming a plant cell with at least one nucleic acid of claim 48; and
    (b) growing the transformed plant cell under conditions sufficient to modulate IPPK activity in the plant cell.

60. (New) The method of claim 59 further comprising regenerating a plant from the transformed plant cell.

61. (New) The method of claim 60, wherein the plant cell is from a monocot or a dicot.

62. (New) A plant produced by the method of claim 60.

63. (New) The transgenic plant of claim 62, wherein the plant is corn, soybean, sorghum, wheat, rice, alfalfa, safflower, sunflower, canola, cotton, or turf grass.

64. (New) The method of claim 59 wherein phytate is reduced.

65. (New) The method of claim 59 wherein non-phytate phosphorous is increased.

66. (New) A method of decreasing phosphorous in non-ruminant animal waste comprising providing animal feed from a plant comprising a nucleic acid of claim 48.

67. (New) A transgenic seed comprising at least one nucleic acid of claim 48.

68. (New) An isolated nucleic acid comprising a member selected from the group consisting of:

(a) a polynucleotide having the sequence set forth in SEQ ID NO: 7; and

(b) a polynucleotide, which is complementary to a polynucleotide of (a).